

## Contributors to this Issue

E. C. WENTE, A.B., University of Michigan, 1911; S.B. in Electrical Engineering, Mass. Inst. of Technology, 1914; Ph.D., Yale University, 1918; instructor in physics and mathematics, Lake Forest College, 1911-12; Engineering Department, Western Electric Company, 1914-16, 1918-24; Bell Telephone Laboratories, 1924-. Mr. Wente has worked principally on general acoustic problems and on the development of special types of acoustic devices.

E. H. BEDELL, S.B., Drury College, 1924; University of Missouri, 1924-25; Bell Telephone Laboratories, Inc., 1925-. Since coming to the Laboratories Mr. Bedell has studied various acoustic problems, notably those of an architectural character.

JOHN R. CARSON, B.S., Princeton, 1907; E.E., 1909; M.S., 1912; Research Department, Westinghouse Electric and Manufacturing Company, 1910-12; instructor of physics and electrical engineering, Princeton, 1912-14; American Telephone and Telegraph Company, Engineering Department, 1914-15; Patent Department, 1916-17; Engineering Department, 1918; Department of Development and Research, 1919-. Mr. Carson is well known through his theoretical transmission studies and has published extensively on electric circuit theory and electric wave propagation.

PAUL P. COGGINS, Harvard University, A.B. in Mathematics, 1920, A.M. in Physics, 1921; Department of Development and Research, American Telephone and Telegraph Company, 1921-27. Statistician, New Jersey Bell Telephone Company, October 1927-. Up to October 1, 1927, Mr. Coggins dealt with the application of the mathematical theory of probabilities, including sampling theory, to various telephone problems.

W. J. SHACKELTON, B.S. in E.E., University of Michigan, 1909; Western Electric Company, Manufacturing and Installation Department, 1909-10; Bell Telephone Laboratories, 1910-. Mr. Shackelton's principal activities have been in connection with the design of loading coils and the development of methods of high frequency measurement.

J. G. FERGUSON, B.S., University of California, 1915; M.S., 1916; research assistant in physics, 1915-16; Bell Telephone Laboratories,

1917-. Mr. Ferguson's work has been in connection with the development of methods of electrical measurement.

C. J. DAVISSON, B.Sc., University of Chicago, 1908; Ph.D., Princeton University, 1911; instructor in physics, Carnegie Institute of Technology, 1911-17; research engineer, Western Electric Company and Bell Telephone Laboratories, 1917 to date. Dr. Davisson's work since coming with the Bell System has related largely to thermionics and electronic physics.

E. PETERSON, Cornell University, 1911-14; Brooklyn Polytechnic, E.E., 1917; Columbia, A.M., 1923, Ph.D., 1926; Electrical Testing Laboratories, 1915-17; Signal Corps, U. S. Army, 1917-19; Engineering Dept., Bell Telephone Laboratories, 1919-.

C. R. KEITH, B.S., 1922, California Institute of Technology; M.A., 1925, Columbia University; Carrier Research Department, Bell Telephone Laboratories, 1922-. Mr. Keith's work has related to the study of vacuum tube and magnetic modulators and other carrier apparatus.

A. L. THURAS, B.S., University of Minnesota, 1912; E.E., 1913; laboratory assistant with U. S. Bureau of Standards, 1913-16; graduate student in physics, Harvard, 1916-17; scientific observer with U. S. Coast Guard, 1917-19; oceanographer, 1919-20; Bell Telephone Laboratories, 1920-. Since joining the Laboratories staff, Mr. Thuras' work has had to do largely with mechanical impedance studies and bridges.